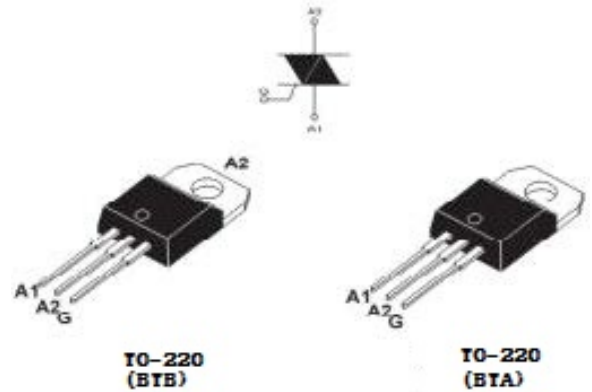


● Features

- * NPNPN Bi-direction Triac
- * Back multilayer metal electrode
- * High temperature reliability
- * Glass Passivated junction chips

Application:

Power tool ,moto speed controller,Vacuum cleaner,heating temperature controller,
Solid state relay and phase control circuits.



● Limiting Values

Symbol	Absolute maximum ratings parameters			Value	Unit
$I_{T(RMS)}$	RMS on-state current	BTA BTB	$T_c=80^{\circ}C$ $T_c=90^{\circ}C$	16	A
I_{TSM}	Non repetitive surge peak on-state current		F=50HZ t=20ms	160	A
I^2t	I^2t value for fusing		tp=10ms	144	A ² S
di/dt	Critical rate of rise of on-state current		$T_j=125^{\circ}C$	50	A/us
VDRM/VRRM	Non repetitive surge peak off-state voltage		$T_j=25^{\circ}C$	600	V
I_{GM}	Peak gate current		tp=20us $T_j=125^{\circ}C$	4	A
PG(AV)	Average gate power dissipation		$T_j=125^{\circ}C$	1	W
T_{stg}	Storage junction temperature range		-40℃~ +150℃		℃
T_j	Operating junction temperature range		-40℃~ +125℃		℃

● **Electrical Characteristics(Ta=25°C unless otherwise specified)**

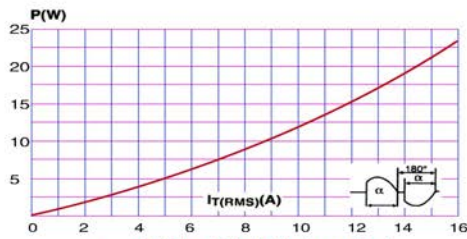
Symbol	Test Conditions	Quadrant		Value	Unit
I _{GT}	V _D =12V R _L =100Ω	I II III IV	MAX	≅ 50	mA
V _{GT}			MAX	1.5	V
V _{GD}	T _j =125°C		MIN	0.2	V
I _H	I _T =0.5A		MAX	60	mA
I _L	I _G =1.2I _{GT}	MAX	I III IV	60	mA
			II	100	
dv/dt	V _D =2/3V _{DRM} T _j =125°C	MIN	500	V/us	
(dv/dt) _c	T _j =125°C	MIN	10	V/us	

● **Static Characteristics**

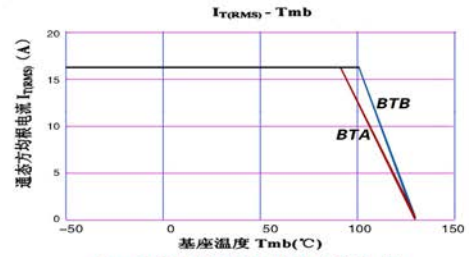
Symbol	Test Conditions		Value	Unit
V _{TM}	I _{TM} = 32A T _j =25°C	MAX	1.50	V
V _{T0}	T _j =125°C	MAX	0.87	V
R _d	T _j =125°C	MAX	14.6	mΩ
I _{DRM} I _{RRM}	T _j =25°C T _j =125°C	MAX	5	uA
			1	mA
R _{th(j-c)}	BTA		2.1	°C/W
	BTB		1.3	

● Typical Characteristics

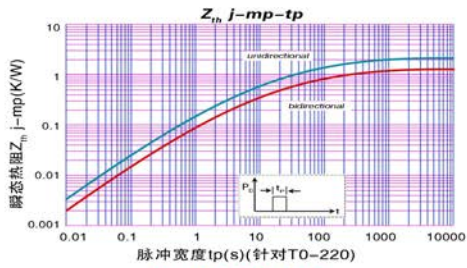
BTA16,BTB16特性曲线(TO-220)



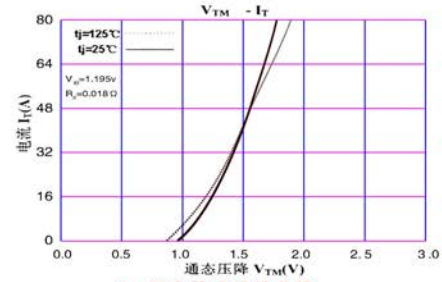
1、功耗与电流曲线 (180°C)



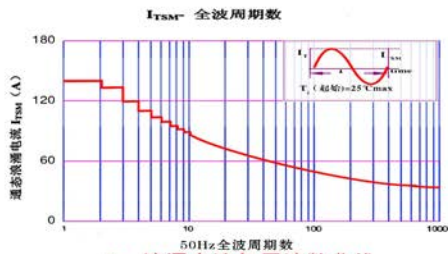
2、壳温与通态方均根电流曲线



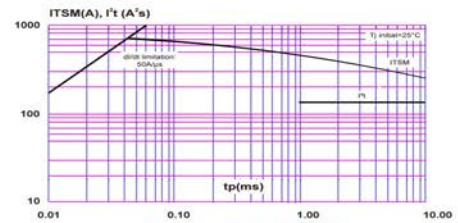
3、瞬态热阻曲线



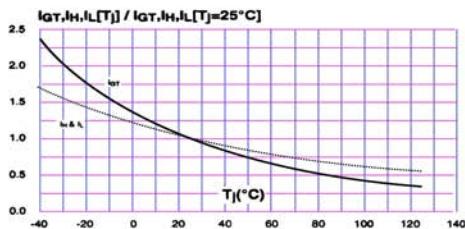
4、通态伏安特性曲线



5、浪涌电流与周波数曲线



6、 $I_{TSM}-t, I^2t-t$ 曲线



7、门极触发特性曲线

● **TO-220 Outline Package Dimension**

Unit: mm (± 0.1)

